Electronic Version
Stylesheet Version v1.1.1

OPTICAL DISC DRIVE THAT DOWNLOADS OPERATIONAL FIRMWARE FROM AN EXTERNAL HOST

Abstract

An optical disc drive includes a microprocessor, a control IC, an RF IC, and an interface unit. The microprocessor is electrically coupled to the control IC. The control IC is electrically coupled to the RF IC, a volatile RAM, an optional non-volatile ROM, and to a bus interface for communications with an external host. The interface unit is electrically coupled to the bus interface. Initialization of the optical disc drive is performed using initialization data stored in a non-volatile manner in the ROM, if present, or downloaded from the host if the ROM is not present. After the initialization, the interface unit signals an application program in the host to download the optical drive's operational firmware and writes received data into the RAM. The microprocessor is initialized with the operational firmware's starting address and the microprocessor executes the downloaded operational firmware.